

Remarks/Argument

This amendment under 37CFR1.111 is in reply to the USPTO communication mailed Jan. 11, 2006. As discussed in a telephone interview with Examiner March 15, 2006, the proposed Amendments to the Drawings includes a new Fig. 3 that is a cross-sectional view taken along lines 3-3 in Fig. 2 showing the C-shaped cross-section of an annular ring section 23. New Fig. 4 is a plan view of an annular closing ring assembly 37 including three-spaced annular ring sections 38, 39, and 40 pivotally interconnected by hinge means 41 and 42. New Fig 5 is a partial cross-sectional view illustrating an annular ring section 22 of an annular two-section closing ring assembly on the lip 29 of a removable lid 30 on the rim 31 of an open head drum 32.

New Figs. 3, 4, and 5 are shown in the attached New Sheet of Drawings.

Figs. 1 and 2 have been amended by deleting the text therein and adding reference numerals to identify the elements of the claimed invention as described in the Specification as filed and as currently amended. The proposed drawing corrections are shown in the attached Replacement Drawings

As shown in the foregoing Listing of Claims, Claims 1 and 4 have been cancelled, Claims 2, 3, and 5 amended and New Claims 6 – 10 added.

It is submitted that the proposed drawing corrections shown in the attached Replacement Drawings and New Sheet of Drawings are fully supported by the Specification and thus do not add new subject matter. Acceptance of the Drawings as amended is requested.

The Specification has been currently amended by deleting the noted Sections of the Specification and replacing them with the noted Replacement Sections as provided under 37CFR1.121(b)(2).

Argument

Examiner has filed a detailed action to which applicant reply's, Section No. by Section No.

1. Applicant has retained the undersigned Attorney of Record, see Power of Attorney attached.

Claim Objections

2. Claim 3 as currently amended is dependent from New Claim 6 and corrects all of the noted informalities.

Drawings

3. Examiner objected to the Drawings under 37CFR1.83(a). The “C-shaped cross-section” of a representative annular ring section 23 in Fig. 2 is shown in Fig. 3 of the New Sheet of Drawings, which is believed in compliance with 37CFR1.83(a). Examiner is requested to accept these changes.

Claim Rejections – 35USC112

4 and 5. Examiner quoted the Second Par. of 35USC112 and rejected Claims 4 and 5 thereunder. Claim 4 has been canceled and Claim 5 currently amended to overcome Examiners Rejection.

Claim 5, dependent from new Claim 6, includes three annular ring sections 38, 39 and 40 pivotally interconnected by hinge means 41 and 42 as shown in Fig. 4. Claim 6 includes at least two annular ring sections 22 and 23. Examiner’s rejections of Claims 4 and 5 are believed traversed.

Claim Rejections – 35USC102

6 and 7. Examiner quotes and applies 35USC102b in rejecting Claims 1-5 as being anticipated by US Patent No. 2, 404, 777 to Gaines, hereinafter Gaines 777. Applicant disagrees.

As to Claim 1 (cancelled) and rewritten as New Claim 6, Gaines 777 shows an annular closing ring formed of two annular ring sections 16 connected together at adjacent spaced ends 17 by threaded nut and bolt fasteners 18. Clearly the annular ring sections 16 of Gaines 777 cannot be rotated around and positioned on the peripheral portion 25 of a cover element 22 to be secured to the flange 2 of container 1.

Rather the connected annular ring sections 16 of Gaines 777 must be fitted over and on the peripheral portion 25 and flange 2 of container 1. Threaded fasteners 18 draw the ends 17 tight to wedge the peripheral portion 25 and the flange 2 together sealing the cover 22 to the container 1. Clearly Gaines 777 does not anticipate applicant’s invention as defined in Claim 6.

Rather the connected annular ring sections 16 of Gaines 777 must be fitted over and on the peripheral portion 25 and flange 2 of container 1. Threaded fasteners 18 draw the ends 17 tight to wedge the peripheral portion 25 and the flange 2 together sealing the cover 22 to the container 1. Clearly Gaines 777 does not anticipate applicant’s invention as defined in Claim 6 wherein an annular

closing ring assembly 21 which includes rotatably interconnected annular ring sections 22 and 23 positionable around and on the peripheral lip 29 of a lid 30 of a rim 31 of an open head drum 32 without creating compression tension resistance in said annular closing ring assembly 21. Currently amended Claims 2, 3, 5 and New Claims 7-10 are also believed similarly distinguishable and allowable over Gaines 777.

As regards to Claim 1 and 4 both have been cancelled.

As regards Claim 3, Claim 3 currently amended and dependent from New Claim 6 includes the adjacent ends 24 of annular ring sections 22 and 23 that are pivotally interconnected by hinge means 26. The reference to "conventional drum-closing ring fastening methods" is not believed of relevance as to Claim 3 whereas adjacent ends 24 are connected at one end by hinge means 26 and which are not believed conventional in drum closing rims and a fastener 36 at the other separation.

Examiner notes, additional prior art having the other arrangement is of record but not relied upon was considered pertinent to Applicant's Disclosure.

As regards Claim 5, now dependent from New Claim 6, Examiner states Gaines 777 fully anticipates applicants annular ring being formed from three sections. The rejection is not made as an obviousness type rejection but additional Prior Art explicitly illustrating three section rings is made of record to expedite prosecution as much as possible.

8. The patents made of record and not relied upon are:

U.S. Pat. No. 1,970,078 to Dillon relates to a pipe coupling;

U.S. Pat. No. 3,062,401 to Needham discloses a closure coupling for a pressure vessel;

U.S. Pat. No. 2,176, 477 to North discloses a segmented clamping ring formed of hinged sections of the ends of which are connected by hinge pins 14 received in cam sets 15 and 19 in brackets 16;

U.S. Pat. No. 2,801,764 to Russell discloses a plurality of annular sections 36 connected in such a manner that the sections 36 may be moved with respect to one another.

In addition to the above prior art, U.S. Pat. No. 3,817,564 to Baldwin, et al is cited in the Information Disclosure Statement filed concurrently herewith. This patent discloses a clamp for sealing the upper and lower portions of a pressure vessel and not a lid 30 on the end 31 of an open head drum 32.

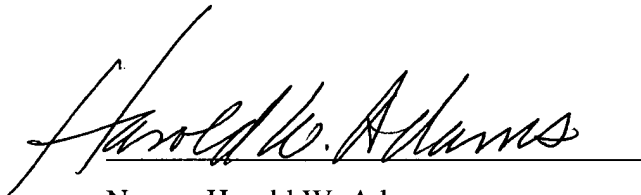
The clamp includes three pivotally connected sections A, B and C that cooperate with a concentric band 13 and fastening means associated with the circular band to fixedly adjust the band with respect to the clamp to seal the two vessels together.

Thus it is believed U.S. Pat. No. 3, 817,564 does not disclose nor suggest applicant's invention as defined in Claim 6. It is submitted that Claim 6 wouldn't be obvious to those skilled in rings for closing drums to use the Baldwin, et al device for sealing two pressure vessels end to end. Otherwise it is submitted that applicant's Claim 6 would be shown in the drum closure prior art, given the importance of making the installation of drum closing rings safer.

Based on the above Arguments, it is believed that Claims 1-10 are patentably distinguishable over the Art of Record and in condition for allowance. Clearly the prior art does not disclose applicants novel annular ring closing assembly 21 in which two or more annular ring sections 22 and 23 are pivotally interconnected, and rotatable around and positionable on the lip 29 of a lid 30 on the rim 31 of an open head drum 32 as shown in Fig. 2. A threadably adjustable fastener 36 connects and compresses the free ends 24 of the annular ring sections to detachably secure the lid 30 to the rim 31 of the open head drum 32 as shown in Fig. 5. Thus Applicants annular multi-section ring assembly 21 is installed around and on the lip 29 of a lid 30 on the rim 31 of an open end drum 32 rather than over and on a rim of an open end drum as is required to install Prior Art split and multi-section drum closure rings.

Entry of this Amendment and allowance of the application is solicited

Respectfully submitted,

A handwritten signature in cursive script, reading "Harold W. Adams", is written over a horizontal line.

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Attachments: Replacement Drawings (two sheets) and
One New Drawing

Appl. No. 10/655,091
AMDT. Dated Apr. 6, 2006
Reply to USPTO Communication mailed Jan. 11, 2006

Amendment to the Drawings

Two Replacement Sheets of Drawings and one New Sheet of Drawings showing new Figs. 3-5 are attached.

Attachments: Replacement Drawings (two sheets) and
One New Drawing